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Alaska Yellow Cedar

(*Chamaecyparis nootkatensis*)

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Alaska yellow cedar, commonly known as Alaska cedar, grows in the Pacific coast region from southern Alaska to Oregon—a distance of nearly 1,000 miles. The wood has a fine, uniform texture, a pleasing yellow color, excellent working and finishing properties, and a high degree of durability. Only small quantities are cut at the present time, but a wider use of the wood seems assured in the future because of its many desirable properties. Locally Alaska cedar is considered highly satisfactory for interior finish, cabinet work, boatbuilding, and turned products. In the northern portion of its range, where conditions of growth are most favorable, mature trees sometimes reach a height of 120 feet and a diameter of 6 feet and probably attain an age of 500 years. Farther south the trees are considerably smaller. The wood of Alaska cedar is quite similar in appearance and properties to the wood of Port Orford white cedar.

Nomenclature.—Alaska yellow cedar is commonly known as Alaska cedar or yellow cedar and less frequently as Sitka cypress and yellow cypress.

Distribution and growth.—Alaska cedar grows in the Pacific coast region of North America from southeastern Alaska southward through British Columbia and Washington to southern Oregon. In Washington and Oregon it is usually confined to the western side of the Cascade Mountains and is not often found below an elevation of 2,000 feet. (See fig. 1.) Here mature trees are generally about 80 feet in height and from 2 to 3 feet in diameter. A diameter of 4 to 5 feet is not uncommon. Trees from 15 to 20 inches in diameter are generally from 200 to 275 years old. Alaska cedar is most abundant and reaches its best development along the coast and on the nearby islands of southern Alaska and British Columbia, where precipitation and humidity are high. It sometimes grows in pure stands, but is more often scattered through the forest among other species. It reproduces readily in moist, shady situations. Later in life it requires more light. The trunk usually tapers sharply from a wide buttressed base. The bark is thin and offers little protection from fire.

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FIGURE 1.—Range of Alaska yellow cedar (*Chamaecyparis nootkatensis*).

Supply.—A recent forest survey¹ gave the stand of Alaska cedar of saw-timber size in Washington and Oregon as 662,700,000 board feet. Of this amount 648,200,000 board feet was in Washington and 14,500,000 board feet in Oregon. Over 90 percent of the entire stand in both States was in western Washington. The stand in Alaska was

¹ See ANDREWS, J. H. and COWLIN, R. W. FOREST RESOURCES OF THE DOUGLAS-FIR REGION. U. S. Dept. Agr. Misc. Pub. 389, 169 pp., illus. 1940. COWLIN, R. W., BRIEGLER, P. A., and MORAVETS, F. L. FOREST RESOURCES OF THE PONDEROSA PINE REGION. U. S. Dept. Agr. Misc. Pub. 490, 99 pp., illus. 1942.

estimated about 1925 at 2,000,000,000 board feet.² No recent estimates for Alaska are available. The stand of Alaska cedar in British Columbia in 1921 was placed at about 4,000,000,000 board feet.³ No information is available as to the proportion of these stands accessible for logging at a reasonable cost, especially in Alaska and British Columbia.

Production.—No lumber production figures are available for Alaska cedar as such. The entire reported production of "cedar" lumber in Washington and Oregon in 1941, 1942, and 1943 was made up of western redcedar, Port Orford white-cedar, and California incense-cedar. Included in this production was undoubtedly a very small proportion of Alaska cedar, roughly estimated at about 5,000,000 board feet annually.

Properties.—The heartwood of Alaska cedar is a bright, clear yellow. The narrow sapwood is white to yellowish and sometimes hardly distinguishable from the heartwood. The annual rings are not generally visible to the naked eye. In texture the wood is fine and uniform and generally straight-grained. It is moderately heavy,⁴ moderately strong, moderately stiff, moderately hard, and ranks moderately high in resistance to shock. The wood shrinks little in drying, is easily worked, is capable of a high polish, and has an agreeable resinous odor. In resistance to decay, Alaska cedar ranks with the most durable species such as the other cedars, cypress, redwood, etc. The wood is said to be easy to kiln dry, to stay in place well after seasoning, and to be easy to glue.

Principal uses.—A large part of the cut of Alaska cedar is used locally for interior finish, furniture, small boat hulls, cabinet work, and novelties. Small amounts were formerly shipped to Japan in log form. The wood is considered especially well suited for small boat construction and competes with Port Orford white-cedar for that purpose. Specialty uses of Alaska cedar are patterns, pyrography, and canoe paddles for which it has long been the preferred wood of the Alaska Indians.

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² THE TIMBER STAND OF THE WEST. Graph prepared by the Pacific Pulp and Paper Industry and based on figures compiled by the U. S. Forest Service.

³ HIBBERSON, R. W. YELLOW CEDAR IN BRITISH COLUMBIA. *Timberman* 22 (12) : 138. 1921.

⁴ The average weight of Alaska cedar in a thoroughly air-dry condition (12 percent moisture) is 31 pounds per cubic foot.

